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REMARKS

Claims 1-11 are in the application.

Claims 1, 3-8 and 10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Koga et al. (5,839,800) in view of Gerstenmaier et al. (JP 6-144153). Regarding Claims 1 and 10, the Examiner states that Koga et al teaches a brake controller for determining a desired rate of deceleration from sensor outputs, and also teaches a regenerative braking system commanded by the brake controller to produce a braking torque corresponding to the desired rate of deceleration. The Examiner further states that Koga et al has a primary speed sensing system for determining speed and deceleration of a vehicle, as well as a deceleration sensor and a brake monitor for receiving sensor inputs for determining an audit range of deceleration. The Examiner admits that Koga et al lacks the specific teaching of comparing two values from separate sensors to a target deceleration; for this, the Examiner looks to Gerstenmaier, which is cited for a teaching of redundancy in sensors in vehicle brake systems. Finally, the Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided Koga et al with redundancy in the sensing of deceleration as taught by Gerstenmaier, to improve vehicle safety and insure operation of the brakes. Applicant respectfully traverses this rejection and requests that each of Claims 1, 3-8 and 10 be reconsidered in view of these remarks and passed to issue over the Examiner's rejection.

As noted above, the Examiner admits that Koga does not teach or suggest comparing two values with target deceleration, using separate systems. Moreover, Gerstenmaier does not teach this, either. Applicant respectfully submits that neither Koga, nor Gerstenmaier, whether taken singly, or in combination with each other, either teach or suggest a system having a redundancy set forth in Applicant's Claims 1 and 10. The fact is that although Koga does not teach redundancy of sensing, and although redundancy of sensing is apparently taught by Gerstenmaier, neither Koga nor Gerstenmaier teaches using the results of separate sensors with separate comparators, in what is, in essence, a partitioned system, to determine whether braking is proceeding as desired by the driver of a vehicle.

Applicant's Claims 1 and 10 recite comparing of a desired rate of deceleration with a measured rate of deceleration by means of a primary comparator, and comparing an audit rate of deceleration with the output from a redundant deceleration sensor by means of a redundant comparator. This dual redundancy is neither taught nor suggested by either Koga or Gerstenmaier. The Examiner's contention that Gerstenmaier teaches redundancy is correct in so far only as Gerstenmaier teaches redundancy of sensing. The Examiner's attention is

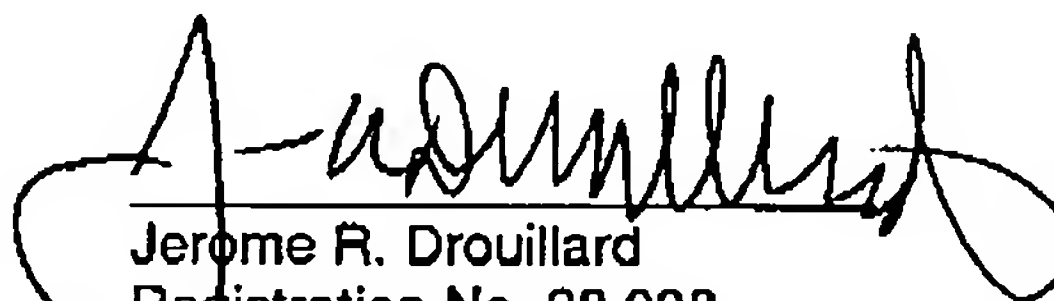
hereby is directed to first five lines of the abstract (translation) provided by the Examiner for Gerstenmaier, wherein it is stated "the controller redundantly processes sensor signals in two parallel channels and monitors through a common perfect (sic) monitor". Thus, Gerstenmaier teaches the use of a single monitor, which is precisely the deficiency sought to be avoided by Applicant's claimed invention. As a result, each of Claims 1-10, as well as those Claims depending therefrom, are allowable over the Examiner's rejection and should be passed to issue. Such action is earnestly solicited.

Claim 2 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Koga in view of Gerstenmaier, and further in view of Byrne et al (4094555). Claim 2 depends from Claim 1 which is allowable over Gerstenmaier and Koga as previously as set forth. Because Byrne teaches comparing the output of decelerometer with an upper and lower deceleration target value, in the context of a vehicle stability control, Byrne whether taken singly, or in combination with either Koga and/or Gerstenmaier does not teach Applicant's claimed invention as set forth in Claim 1 and Claim 2 and should therefore be passed to issue over the Examiner's rejection. Such action is earnestly solicited.

Claims 9 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Koga in view of Gerstenmaier and further in view of Crombez et al (6655754). The Examiner states that Crombez teaches use of a warning indicator for a driver. Crombez does not, however, teach or suggest the dual monitoring claimed by Applicant.

Applicant respectfully submits that neither Koga et al, nor Gerstenmaier, nor Crombez, which is assigned to the assignee of the present invention, either teach or suggest the system set forth in Claims 1 and 10, and, as a result Claims 9 and 11 should be passed to issue over the Examiner's rejection.

Respectfully submitted,

  
Jerome R. Drouillard  
Registration No. 28,008  
Attorney for Applicants

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Artz & Artz, PC  
28333 Telegraph Road, Suite 250  
Southfield, Michigan 48034  
(248) 223-9500